

REMARKS

Claims 1-13 and 15 are pending. Claims 2-12 have been amended. In view of the above amendments and the following remarks, reconsideration and further examination are respectfully requested.

The examiner rejected claims 2-10 under 35 U.S.C. 112, second paragraph, as being indefinite. The applicant has amended these claims to refer to "apparatus" rather than "spring device" to overcome this rejection.

Claims 1-5, 7-8 and 10 are now rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,946,145 to Kurabe.

This rejection reflects a misunderstanding of the Kurabe reference. Kurabe is directed to a seat level regulator, which can be shown for example by the figures of Kurabe. In Fig. 2(A) both valves 50, 52 are closed. In Fig. 3(A) a condition is shown in which the seat is too low. Therefore, the valve 50 is opened. Air is then supplied to the air spring, as shown in Fig. 3(B).

If the valve 52 is opened, which means that the seat is too high, then you have the condition as shown in Fig. 4(A). In this situation, air is exhausted from the air spring, as shown in the active situation according to Fig. 4(B).

Compared to that, the present invention has a very simple valve construction that is illustrated, for comparison to the Kurabe figures, in Attachment A. This valve can only connect or disconnect a connection line between the additional volume and the air spring. This connection is opened so long as the seat according to the subject of the present application is inside of a comfort range. If the seat leaves the comfort range, the connection line will be closed. By using this additional volume 1 in connection with the air spring 2, as shown in Attachment A, it is possible to get a really large stamping volume inside of the

comfort range and, therefore, provide force line inside the comfort range which is nearly horizontal (see Fig. 1, item 10 in the present application).

By comparison, an air spring force diagram of the function shown in Kurabe, you would get a diagram which is shown in Attachment B. You can see from this diagram that the center area 10 is not a comfort range with a horizontal force line. This range has an inclined slope. When a valve is opened in Kurabe, at the distance point 11 where air is compressed in, the curve has a steeper slope as is shown at reference sign 12. When the situation of compressing in the additional air is complete, the seat can be moved starting from the point 13 along the force line 14, which is parallel to the original force line 10. This parallel line 14 results from the additional air inside of the air spring.

Contrary to that, according to the present application there is no additional air during the backward movement of the air spring. Rather, during the backward movement of the air spring the air volume inside of the air spring is the same, since the additional volume of air was disconnected. This means, in the present invention, that the air volume in the air spring during the upward and downward movement outside of the comfort range is the same, and, therefore, it is possible to reach exactly the same point during the downward or backward movement as it was at the starting point at the beginning of this movement outside of the comfort range.

In Attachment B you can also see the illustrated force-path diagram for the Air-out situation, in addition to the Air in-situation, for Kurabe. It is quite clear by comparing the force diagrams for Kurabe, as shown by Attachment B, and those of the present application that they address different subjects and operations. Again, as previously argued, the distinction the examiner continues to overlook is that claim 1 recites switching an additional volume of air, rather than compressing air into, or exhausting air out of, an existing containing volume. As such, Kurabe does not anticipate claim 1 or any claims dependent thereon.

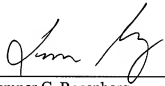
ATTORNEY DOCKET NO. 08146.0001U1
APPLICATION NO. 10/812,833

The examiner also rejected claims 6, 9, 11-13 and 15 under 35 U.S.C. 103(a) as being unpatentable over Kurabe. For the same reasons given above, Kurabe is inapposite as a reference with respect to the invention set forth in these claims.

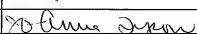
Therefore, it is respectfully submitted that claims 1 and 11 are patentable over Kurage and that these claims should be allowed. Since the remaining claims 2-10, 12, 13 and 15 are dependent either directly or indirectly from one of these claims, all claims should now be allowed.

No fee is due. However, the Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 14-0629.

Respectfully submitted,


Sumner C. Rosenberg
Reg. No. 28,753

Ballard Spahr Andrews & Ingersoll, LLP
Customer Number 23859
(678) 420-9300
(678) 420-9301 (fax)

CERTIFICATE OF ELECTRONIC TRANSMISSION UNDER 37 C.F.R. § 1.8			
I hereby certify that this correspondence, including any items indicated as attached or included, is being transmitted via electronic transmission via EFS-Web on the date indicated below.			
Name of Person Mailing (Print/Type)	Jo Anne Tyson		
Signature		Date	5/5/2009